SOUTHERN DISTRICT OF NEW YORK	X	
FLOYD, et al.,	Plaintiffs,	DECLARATION OF DENNIS C. SMITH
-against-		08 Civ. 1034 (SAS)
CITY OF NEW YORK, et al.,		
	Defendants.	
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DENNIS C. SMITH declares, pursuant to 28 U.S.C. § 1746, under penalty of perjury, that the following is true and correct:

I am an Associate Professor of Public Policy at the Robert F. Wagner School of Public Service at New York University ("NYU Wagner"). I have been retained by the Defendants in this action as a testifying expert. I have previously submitted a report in this case, Report of Dennis C. Smith, Ph.D., dated November 15, 2010 ("Report" or "Smith Report"), which also contains my current curriculum vitae; a Declaration, dated December 19, 2011 ("12/19/11 DS Decl." or "12/19/11 Decl."), in support of Defendants' motion to preclude all expert reports and opinions of Jeffrey Fagan, Ph.D ("Fagan") ("Defs'. Mot." or "Defs.' *Daubert* motion"); and a Reply Declaration, dated February 16, 2012 ("02/16/12 DS Reply Decl." or "02/16/12 Decl."), in further support of Defendants' *Daubert* motion. I submit this Declaration in opposition to Plaintiffs' motion to exclude certain of my opinions in this case ("Pls.' Mot." or "Plaintiffs' *Daubert* motion"). I have personal knowledge of the facts contained herein based on my review of documents and business records of the City of New York. I have reviewed the Plaintiffs' *Daubert* motion and supporting submissions, as well as all analyses submitted by

Fagan in this case, including: the Report of Jeffrey Fagan, Ph.D., of October 15, 2010 ("Fagan Report"); the Supplemental Report of Jeffrey Fagan, Ph.D., of December 3, 2010 ("Fagan Supp. Report"); Fagan's Affidavit of September 28, 2011 in support of plaintiffs' motion to amend/correct Order on defendants' motion for summary judgment ("09/28/11 JF Aff."); Fagan's Declaration of November 6, 2011 in support of plaintiffs' motion for class certification ("11/6/11 JF Decl."); Fagan's Declaration of February 2, 2012 in opposition to Defs.' *Daubert* Mot. ("02/2/12 JF Decl."); and Fagan's Supplemental Declaration in opposition to Defs.' *Daubert* Mot. ("03/14/12 JF Supp. Decl."). I have also reviewed the transcript of Fagan's deposition taken on February 9, 2011, as well as all articles and sources cited herein.

Qualifications and Consultation With Other Experts

2. As described in my Report, I began my study of police organizations and police behavior as a doctoral student at Indiana University in 1969, working under Professor Elinor Ostrom, a political scientist who received the 2009 Nobel Prize in Economics. I have conducted and contributed to numerous privately commissioned as well as federally-funded studies assessing various aspects of police organizations, including training techniques,

¹ I am informed that the relevant documents are in the record before the Court as follows: Smith Report, Exhibit B of Declaration of Darius Charney, dated June 26, 2012 ("06/26/2012 Charney Decl.") in support of plaintiffs' motion to exclude certain opinions of defendants' proposed expert, Dennis Smith (Dkt # 217); 12/19/11 DS Decl. (Dkt # 181); 02/16/12 DS Reply Decl. (Dkt # 193); Declaration of Robert M. Purtell, dated February 16, 2012 ("02/16/12 RP Decl.") (Dkt # 194); Plaintiffs' Notice of Motion to Exclude Certain Opinions of Defendants' Proposed Expert, Dennis Smith ("Pls.' Mot.") (Dkt # 215); Plaintiffs' Memorandum of Law in Support of Pls.' Mot. ("Pls.' Mem.") (Dkt # 216); Declaration of Darius Charney in Support of Pls.' Mot. ("06/26/2012 Charney Decl.") (Dkt # 217); Fagan Report and Fagan Supp. Report on plaintiffs' opposition to defendants' motion for summary judgment (filed under seal as Dkt #132); 09/28/11 JF Aff. (Dkt # 156); 11/6/11 JF Decl. (Dkt #168); 02/2/12 JF Decl. (Dkt # 189); 03/14/12 JF Supp. Decl. (Dkt # 198); and the Transcript of Hearing on Defs.' *Daubert* Motion held on March 8, 2012 ("*Daubert* Hearing") (Dkt # 199).

management policies, and the implementation of specific crime-fighting strategies in major metropolitan areas across the country. I have been studying the New York City Police Department ("NYPD") in particular since the late 1970s.

- 3. As set forth in my curriculum vitae, I hold a Ph.D. in Political Science. While I am not a statistician, my professional training entailed the study of statistics, and I have incorporated statistical analysis into my research on urban police policy and management throughout my career, including in publications dating from 1973 through the present. Additionally, I created the graduate course on evaluation research methodology at the NYU Wagner School, taught the subject for many years, and participated in evaluation research studies. Evaluation research as an applied social science field is inherently multidisciplinary and multimethod, using both quantitative and qualitative tools. At the NYU Wagner School, the core curriculum in policy analysis, the design of which I helped create, includes three interrelated courses: Program Analysis and Evaluation, which I designed and have taught; Multiple Regression and Introduction to Econometrics; and Public Economics and Finance. No member of the Wagner faculty teaches all of these courses but all who teach them are expected to coordinate and integrate the materials in the set. Our core course, Program Analysis and Evaluation, focuses on understanding and explicating the logic of policies and programs but the assigned readings address the use of multiple regression in both quasi experimental and classical experimental designs used to test whether the evidence supports the assumptions in the program theory.
- 4. Under Professor Ostrom, I worked with a team of graduate students from different academic backgrounds to undertake federally funded empirical studies of policing in the Indianapolis, Chicago and St. Louis, Missouri metropolitan areas. Among other roles, I

contributed the statistical analyses included in several of these collaborative studies which were published in peer-reviewed publications, including a study of the effects of training and education on police attitudes and performance in twenty-nine police departments in the St. Louis metropolitan area published in 1974. After joining the faculty at NYU, in 1977 I was part of a multidisciplinary team of faculty from three universities organized by Elinor Ostrom to undertake a study of policing in three metropolitan areas (Rochester, New York; St. Petersburg/Tampa, Florida; St. Louis, Missouri) that was funded by the Research Applied to National Need Division of the National Science Foundation. As exemplified by my experience working with Professor Ostrom's multi-disciplinary team, collaboration among researchers from different academic disciplines is standard practice in policy research.²

a. For example, the National Institutes of Health extensively funds policy relevant research projects described in requests for proposals ("RFPs"). These RFPs make clear the submitted proposals should present multidisciplinary teams, generally including a mix of MDs (for clinical expertise), biostatisticians, epidemiologists or health services researchers, etc. If the project includes a cost analysis the team would include a cost expert. One of the experts I consulted in my work on this case, University of Albany Assistant Professor Erica Martin, is participating in a Center for Disease Control project team that includes cost experts, modeling

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² In a recent article, three scholars from Princeton, Harvard and MIT addressed the importance of collaboration between political scientists and statisticians. *See* Kosuke Imai, et al., *Reply to* "*Experimental Designs for Identifying Causal Mechanisms*" (with discussions), JOURNAL OF THE ROYAL STATISTICAL SOCIETY, SERIES A (STATISTICS IN SOCIETY), *forthcoming* 2012. Read before the Royal Statistical Society in March 2012. ("Finally, we conclude our discussion by emphasizing the importance of close collaboration between statisticians and applied researchers.") (at 5), *available at:* http://imai.princeton.edu/research/files/DesignComment.pdf.

- experts, general analysts, and HIV specialists. Professor Martin is a University of Michigan and Yale University trained epidemiologist and health policy analyst.
- 5. It is an approach I have followed throughout my research career, in which I have collaborated extensively with experts from other fields, and including with statistical experts. Statistical analyses, at times performed in collaboration with other experts, have consistently been critical components of my studies and publications, including but not limited to the following studies published in peer reviewed journals, whose titles convey their subjects:
 - a. Dangers of Police Professionalization: An Empirical Analysis, JOURNAL OF CRIMINAL JUSTICE, Vol.6, Fall 1978. Earlier version presented to the American Society for Public Administration, Annual Meetings, Washington DC, 1976);
 - b. Police Attitudes and Performance: The Impact of Residency, URBAN AFFAIRS QUARTERLY, Vol. 15, No. 3 (March, 1980);
 - c. Dennis C. Smith and Diane Baillargeon, In Pursuit of Safety: Alternative Patterns of Police Production in Three Metropolitan Areas, JOURNAL OF SOCIAL ISSUES, Vol. 30, No. 4 (1980).
 - 6. More recent examples include:
 - a. an empirical evaluation of an NYPD police administrative reform involving the consolidation of bureaus in Brooklyn North under the Patrol Commander with the then Senior Economist with the City Board of Trade, in 2005;
 - b. 2007 study of the relationship between crime reduction and economic development in New York City;
 - c. an assessment in 2007 of the NYPD's Operation Impact program in relation to crime reduction;

- d. a 2008 study of the efficacy of stop and frisk practices as crime prevention strategy.
- 7. The latter four studies listed above, all of which were presented by invitation at national research conferences, were co-authored by myself and statistical expert Dr. Robert Purtell ("Purtell"), and incorporated multiple regression analyses.
- 8. Multiple regression analysis is a statistical tool regularly employed in policy research, as it serves the common policy-oriented aim of attempting to discern relationships among observed phenomena, or variables. However, relationships between variables discovered through regression analysis do not necessarily represent causal relationships between the variables.
- 9. While it must be used with care, multiple regression forms a routine part of the discourse in my field. I have experience interpreting, critiquing, writing about and presenting on findings that include multiple regression analyses. I am able to understand and develop hypotheses regarding specific multiple regression models, and I have experience engaging in dialogue with my colleagues who have statistical expertise about the ability of particular multiple regression models to reliably test hypotheses.
- 10. In addressing Fagan's analyses in this case, I relied upon both my training and expertise in urban policing practices and my experience with empirical research methods, including multiple regression analysis. All of my expert submissions in this case, including my Report and declarations, represent my own opinions. Some of these opinions are based solely on my own expertise and analysis, while others were informed by consultation with other experts in order to develop, confirm and test my theories, as is standard practice in my field.

For example, based on my knowledge of policing practices, I concluded that Fagan's multiple regression model was flawed because it was not based on a correct representation of the model of policing New York City in use for the past decade and a half, and thus was not testing the correct factors in attempting to explain observed patterns in stop, question and frisk ("SQF") activity by the NYPD. It is axiomatic that the first step in developing a reliable multiple regression model is to start with the correct assumptions.³ Fagan's model is based on certain assumptions, as reflected in his choices of variables and benchmark, which I believe are incorrect and yield unreliable results because they do not reflect the reality of policing in New York City; these opinions are based on my training and experience studying police organizations and behavior, and the NYPD in particular over a nearly thirty-year period.⁴

Finally, we conclude our discussion by emphasizing the importance of close collaboration between statisticians and applied researchers. As George Box succinctly put it, "the business of the statistician is to catalyze the scientific learning process." Any study of causal mechanisms will be best designed by taking into account specific aspects of scientific theories under investigation. While the experimental designs proposed in our paper may serve as a starting point, we believe that in many situations they must be modified to directly address the methodological challenges faced by the researcher. In particular, practical difficulties of causal mediation analysis can be overcome by technological advances (as in the neuroscience example in our paper) and creativity on the part of the researcher (as in the labor market discrimination example). Some contributors discussed potential applications and specific challenges that range from medicine and social sciences to engineering (e.g., Egleston, Gelman, Leiva and Porcu, Kuroki). The challenges of causal mediation analysis should therefore motivate, rather than discourage, scientists and statisticians who are working on this important problem. For many statisticians, the mantra "No causation without manipulation," which was put forth by Holland (1986) more

³See Carol Arshenel, Theory-Based Data Analysis for the Social Sciences, Sage Publications, 2002.

⁴ In making the case for collaboration between political scientists and statisticians, three scholars from Princeton, Harvard and MIT also emphasize the priority of causal theory before data analysis:

- 12. I have extensive experience critiquing the theories and assumptions underlying statistical models, including in my prior empirical studies with Dr. Joseph Benning and with Purtell on policing in New York City. In all of my prior collaborative work with Purtell, the models tested by his statistical analyses were developed primarily by me based on my knowledge of policing an area in which Purtell himself lacks expertise and relies upon my guidance.
- omitted variable bias and employed an incorrect benchmark, thereby producing skewed and unreliable results, I consulted specialists in other fields who have statistical expertise, including Professors Erica Martin, an epidemiologist, and Kathleen Deloughery, an econometrician whose recent research is on terrorism both of whom have doctoral level training in statistics as well as Purtell, whose background is in quantitative studies and public finance. My discussions with these other experts allowed me to confirm my hypotheses regarding the inability of Fagan's regression model to reliably explain the evidence regarding racial patterns in NYPD SQF

Imai, et al., Reply to "Experimental Designs for Identifying Causal Mechanisms," supra n.2 at 5.

than two decades ago, has been a starting point of causal analysis. While we agree on the fundamental importance of manipulation in any causal analysis, this mantra should not be taken as a commandment that forbids certain scientific inquiry. Recently, Judea Pearl proposed another mantra "Causation precedes manipulation." This reminds us that manipulation is merely a tool used by scientists to identify causal quantities of interest. It is clear to us, and hopefully to readers, that statisticians should no longer be passively analyzing the data collected by applied researchers. Rather, they must understand the causal mechanisms specified by scientific theories and work together with applied researchers to devise an optimal design for testing them.

activity, due to Fagan's lack of knowledge or understanding of the policing practices and strategies in question, and to his failure to consider alternative explanations for the patterns observed – both of which are manifested in his flawed multiple regression model.

- Throughout my critiques of Fagan's analyses, I have repeatedly noted that his failure to rule out obvious alternative explanations for statistical patterns observed is a critical flaw in his methodology. In his regression models, this flaw is manifested in his omission of key variables from his regression analysis and his inappropriate choice of benchmark; however, as described in greater detail below, this fatal flaw poisons more than just Fagan's regression analyses. In Fagan's 02/02/12 Decl. at ¶19, he introduces Donald Campbell's widely accepted approach to evaluation which is to identify plausible rival hypotheses to compare with the researcher's preferred hypothesis. That is what our analysis regarding Fagan's multiple regression and his other analyses did.
- The particular types of regressions employed by Fagan (multilevel poisson, multilevel logistic and negative binomial regressions) are not relevant to my critiques of his methodology. My central critiques of Fagan's regressions question the basic building blocks of his statistical analyses, such as: whether he operationalized variables correctly (for example, I noted that Fagan's discussion of race as a key variable in his analysis is unclear: in at least Table 3 of his Report he combines non-Hispanic Blacks and Hispanic Blacks as "Blacks," while in the US Census and NYPD reports, Black Hispanic and White Hispanics are combined into a single category, "Hispanic"); whether his temporal assumptions, which are a key element in drawing causal inferences from findings, are reasonable (*e.g.*, does it make sense to use last year's or last quarter's crime data as a control for the role of crime in stop patterns when the practice of the NYPD is to make deployment and other decisions influencing stop activity based on current –

not past – crime reports?); whether it is reasonable and reliable to use logged crime data as a control, which masks temporal trends by "smoothing" out crime spikes, when police practice is to respond immediately to spikes in crime; and whether the presentation of the details of tools used in the construction of data used in analysis (*e.g.*, weightings used in factor analyses) are sufficient to allow interpretation or replication.⁵ These are all basic issues in statistical analysis that determine whether the complex edifice of the various forms of multiple regression have any prospect of standing. As such, they are among the standard types of questions asked when a researcher seeks to evaluate the reliability of a regression of any type; this is consistent with my prior experience. Here, I concluded that given the many weaknesses in the building blocks used by Fagan in constructing his regressions, it is unlikely that any multiple regression findings could be accepted as valid social science claims.

16. Likewise, my critiques regarding Fagan's choices of benchmark, omitted variables, and other basic problems in his methodology pertain equally to all of the regression models in his analyses, which all suffer from these same fundamental flaws. The critical issue with which I was concerned was not which particular type of regression Fagan chose to run but whether his models could reliably test his hypotheses regarding relationships among variables, based on the data and variables he chose to include.

"Alternative" Regression Analysis

17. The "alternative" regression analysis presented in my 12/19/11 Decl. (Dkt # 181) is an illustration of my critiques, originally presented in my Report, that Fagan's multiple regression model is unreliable because it omits key variables and employs an inappropriate

⁵ See generally Smith Report, Ex. B to 06/26/2012 Charney Decl. (Dkt # 217); 12/19/11 DS Decl. (Dkt # 181); 02/16/12 DS Reply Decl. (Dkt # 193).

benchmark. It is responsive to all of Fagan's regression analyses, including those presented for the first time in Fagan's 11/06/11 Decl. (Dkt # 168).

- 18. Consistent with the process described above, I developed the alternative regression model in collaboration with Purtell in order to confirm and mathematically demonstrate the theories underlying my critiques of Fagan's model. I devised the alternative benchmark of suspect race as captured in arrest and crime complaint reports, and Purtell constructed and implemented the regression model at my direction.
- 19. To clarify, the aggregated 2009 and 2010 crime suspect data we used included suspects from all crime categories, not just violent crime.
- 20. As explained in my 12/19/11 Decl. (Dkt # 181) at ¶¶30-31, our "alternative" regression demonstrates that incorporating the omitted, appropriate benchmark into a basic regression model similar to Fagan's, reduced or eliminated race as a significant factor in explaining SQFs of minorities. Again, we were simply seeking to show that Fagan's analysis had failed to adequately account for an obvious rival hypothesis by failing to include a variable that is highly correlated with both the dependent and independent variable on which he bases his conclusions.
- 21. In keeping with our aims, our model does not include the control variables used by Fagan; we only included the variables that were key to his conclusion of racial discrimination (percentage Black and percentage Hispanic stopped, along with crime suspect description),⁶ in order to show that incorporating suspect race can drastically alter the results of the analysis.

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⁶ Since it is sometimes conflated in Fagan's writing, reference to the variable "suspect description" refers to the recommended benchmark based on the overall pattern of identifying Continued...

- 22. We undertook the "alternative" regression as a basic illustration after noting that, in his several submissions, Fagan adjusted some aspects of his methodologies in response to our critiques, such as analyzing smaller areas than precincts and adding unemployment as a control variable; however, he never tested our contention that he had employed an incorrect benchmark and omitted a key variable. This is despite the fact that, in his published work, Fagan had acknowledged that knowledge of who was committing crimes would be the best point of reference, or benchmark, in assessing proportionality of stops.
- 23. In my opinion, the fact that including the suspect race variable in Fagan's basic regression model has such a dramatic and obvious effect on his results raises the questions about whether/how Fagan's bias and/or inadequate knowledge of policing influenced his analysis. At the very least, it demonstrates that Fagan's model is not robust to other specifications and the inclusion of a key variable. Our "alternative" regression sought to bring to light this significant evidence challenging the validity of Fagan's analysis.
- 24. Inclusion of Fagan's control variables was also not warranted because his analysis demonstrated that most of the control variables were not statistically significant.

crime perpetrators from victim complaint reports and arrest reports, combined carefully to avoid duplicate counts. It does not refer to the checkbox on the U250 form, "Fits description."

⁷ Fagan Supp. Report (Dkt # 132) at 9-15.

⁸ See, e.g., Jeffrey A. Fagan, et al., Street Stops and Broken Windows Revisited: The Demography and Logic of Proactive Policing in a Safe and Changing City, in RACE, ETHNICITY AND POLICING: NEW AND ESSENTIAL READINGS (S.K. Rice and M.D. White, eds. 2010), Ex. G of Declaration of Heidi Grossman, Esq. dated December 19, 2011 ("12/19/11 HG Decl.") (Dkt # 180), at 318: "This approach requires estimates of the supply of individuals engaged in the targeted behaviors, and the extent of racial disproportionality is likely to depend on the benchmark used to measure criminal behavior."

Furthermore, data on the control variables was not provided to us so we did not have the ability to include these controls even if we had deemed it necessary.

25. Moreover, as we contend Fagan's regression models were flawed, we did not seek to replicate his flawed modeling.⁹

Correlation Coefficients

- The table of correlation coefficients I presented in my 12/19/11 Decl. (Dkt # 181) at ¶15, Ex. E, showing that police stops by race in a given precinct are more highly correlated with the proportion of criminal suspects and arrestees by race in that precinct than with the overall crime rate in that precinct, challenges Fagan's analysis in his 11/06/11 Decl. (Dkt # 168) ¶16, which concluded, *inter alia*, that "the finding of significant higher stops of Black and Hispanic and persons during the period of 2004-2009 is evident in all parts of the City, regardless of their racial composition, or their crime, or other social condition." My analysis involving the correlation coefficients contests the reliability of Fagan's conclusion by demonstrating his failure to consider a plausible alternative hypothesis in his analysis.
- 27. The equation on which my analysis was based was the same basic equation employed by Fagan in his analysis, but testing different variables. Fagan's expertise should have enabled him to interpret and test my equation based on the information provided in my 12/19/11 Decl. (Dkt # 181).

⁹ The Fagan Report (Dkt # 132) at 74-75 similarly criticizes Greg Ridgeway's RAND study, *Analysis of Racial Disparities in the New York Police Department's Stop, Question and Frisk Practices (available at* http://www.rand.org/pubs/technical_reports/2007_TR534.pdf), for imprecisely "replicating" one of Fagan's regressions, ignoring the fact that Ridgeway explained that Fagan's model contained flaws which Ridgeway's revisions addressed. Ridgway's intent was, like ours, was to demonstrate the weakness in the analysis Fagan wanted him to replicate.

28. Notwithstanding, the standard equation for the correlation coefficient which I used in my analysis is:

$$r = \frac{\sum XY - \frac{\sum X\sum Y}{N}}{\sqrt{(\sum X^2 - \frac{(\sum X)^2}{N})(\sum Y^2 - \frac{(\sum Y)^2}{N})}}$$

"Hit Rates"

- 29. My opinion that the low rate of weapons recovered in SQFs by the NYPD ("hit rate") may indicate that the NYPD's increased SQF activity has had a deterrent effect on the carrying of weapons, ¹⁰ is based on the same statistical data as Fagan's opinion that low hit rates suggest that the majority of stops by the NYPD lack reasonable suspicion. I am simply offering an alternative explanation for the statistical phenomenon described by Fagan.
- 30. My analysis exposes a weakness in Fagan's analysis, which makes an unsupported logical leap from data exhibiting a statistical correlation to a purported explanation for the correlation, without considering any alternative explanations. My analysis demonstrates that Fagan's analysis once again suffers the fatal flaw of conflating correlation with causation.
- 31. Fagan's comparison of hit rates in random roadblocks where, I opined, there is no reason to expect a deterrent effect (since those stopped are, by definition, unaware of the risk of such "random" roadblocks), is his only effort at supporting his interpretation of low hit rates. On the contrary, prevention strategies in policing are anything but random; the idea is to communicate to would-be offenders that the opportunity to commit crimes without detection has

¹⁰ See Smith Report, 06/26/2012 Charney Decl., Ex. B (Dkt # 217) at 20, 39.

been reduced. I illustrated by analogy with other prevention programs, that a decline in the phenomena that the intervention was intended to produce is not as a rule used as a basis for judging the preventive measure a failure. Specifically, if in a random assignment drug trial the population receiving the treatment recorded a declining incidence of the targeted disease this evidence would be offered in asking for FDA approval, not a basis for discrediting its efficacy. If SQF patterns for persons stopped for a wide range of suspicious behavior result in declining arrests and declining weapons in general and guns in particular discovered, this is consistent with the theory that police vigilance and proactive intervention deters crime. A reasonable indicator of this relationship is the persistent decline in homicides in New York City, while other jurisdictions such as Chicago and Philadelphia have reportedly experienced an increase.

Crime Deterrence

- 32. My opinions regarding the deterrent effects of the NYPD's Operation Impact¹¹ program are submitted as yet another example of Fagan's refusal to consider alternative motivations for the police behavior captured by the SQF statistics.
- 33. My analysis, including the article co-authored by myself and Purtell,¹² provides evidence supporting a rival hypothesis dismissed by Fagan, *i.e.*, that the motivation for deployment of greater numbers of officers to majority-minority neighborhoods is based on a proven strategy to combat elevated levels of crime in such neighborhoods relative to other neighborhoods within the City, rather than on racial discrimination. It offers an alternative

¹¹ See, e.g., Smith Report, 06/26/2012 Charney Decl., Ex. B (Dkt # 217), at 49, 51-54.

¹² Smith Report, 06/26/2012 Charney Decl., Ex. B (Dkt # 217), at App. D (Dennis C. Smith and Robert Purtell, "An Empirical Assessment of NYPD's Operation Impact: A Target Zone Crime Reduction Strategy." A Report to the Commissioner, June 2007).

explanation for the statistical pattern observed by Fagan that greater numbers of stops take place in neighborhoods with higher populations of minorities, and helps explain the higher number of stops of minorities relative to non-minorities in the City.

Plaintiffs' claim that I offer a legal conclusion that "NYPD officers do not make stops on the basis of race" (Pls.' Mem. at 1) mischaracterizes my opinion that "there is no compelling evidence that NYPD officers are making stops based on race or ethnicity[,] but instead are pursuing a strategy and using tactics that prevent crime and benefit the City as a whole, and communities of color in particular" (Smith Report, 06/26/2012 Charney Decl., Ex. B (Dkt # 217), at 8). This is simply my interpretation of the factual evidence based on my expertise in policing practices and my empirical research experience; I do not attempt to make or espouse any legal conclusions. Fagan has not offered compelling evidence of anything other than correlation, which scholars are universally admonished not to confuse with causation. In my opinion, this flaw fatally undermines the reliability of Fagan's analyses.

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Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed on July 24, 2012, in New York, New York.

Dated: New York, New York July 24, 2012

Dennis C. Smith